FIG 1A.

KTCYEGNGHFYRGKASTDTMGRPCLPWNSATVLQQTYHAHRSDALQLGL
GKHNYCRNPDNRRRPWCYVQVGLKPLVQECMVHDCADGK

FIG 1B.

SNELHQVPSNCDCLNGGTCVSNKYFSNIHWCNCPKKFGGQHCEIDKS

FIG 1C.

SNELHQVPSNCDCLNGGTCVSNKYFSNIHWCNCPKKFGGQHCEIDKSKTC
YEGNGHFYRGKASTDTMGRPCLPWNSATVLQQTYHAHRSDALQLGLGK
HNYCRNPDNRRRPWCYVQVGLKPLVQECMVHDCADGKKPSSPPEELKFQ
CGQKTLRPRFKIIGGEFTTIENQPWFAAIYRRHRGGSVTYVCGGSLISPCWV
ISATHCFIDYPKKEDYIVYLGRSRLNSNTQGEMKFEVENLILHKDYSADTL
AHHNDIALLKIRSKEGRCAQPSRTIQTICLPSMYNDPQFGTSCEITGFGKENS
TDYLYPEQLKMTVVKLISHRECQQPHYYGSEVTTKMLCAADPQWKTDSC
QGDSGGPLVCSLQGRMTLTGIVSWGRGCALKDKPGVYTRVSHFLPWIRSH
TKEENGLAL

FIG 1D.

SNELHQVPSNCDCLNGGTCVSNKYFSNIHWCNCPKKFGGQHCEIDKSKTC
YEGNGHFYRGKASTDTMGRPCLPWNSATVLQQTYHAHRSDALQLGLGK
HNYCRNPDNRRRPWCYVQVGLKPLVQECMVHDCADGK

FIG 1E.

KPSSPPEELKFQCGQKTLRPRFKIIGGEFTTIENQPWFAAIYRRHRGGSVTY
VCGGSLISPCWVISATHCFIDYPKKEDYIVYLGRSRLNSNTQGEMKFEVEN
LILHKDYSADTLAHHNDIALLKIRSKEGRCAQPSRTIQTICLPSMYNDPQFG
TSCEITGFGKENSTDYLYPEQLKMTVVKLISHRECQQPHYYGSEVTTKMLC
AADPQWKTDSCQGDSGGPLVCSLQGRMTLTGIVSWGRGCALKDKPGVYT
RVSHFLPWIRSHTKEENGLAL

FIG 1F.

SNELHQVPSNCDCLNGGTCVSNKYFSNIHWCNCPKKFGGQHCEIDKSKTC
YEGNGHFYRGKASTDTMGRPCLPWNSATVLQQTYHAHRSDALQLGLGK
HNYCRNPDNRRRPWCYVQVGLKPLVQECMVHDCADGK//LKFQCGQKTL
RPRFKIIGGEFTTIENQPWFAAIYRRHRGGSVTYVCGGSLISPCWVISATHCF
IDYPKKEDYIVYLGRSRLNSNTQGEMKFEVENLILHKDYSADTLAHHNDIA
LLKIRSKEGRCAQPSRTIQTICLPSMYNDPQFGTSCEITGFGKENSTDYLYPE
QLKMTVVKLISHRECQQPHYYGSEVTTKMLCAADPQWKTDSCQGDSGGP
LVCSLQGRMTLTGIVSWGRGCALKDKPGVYTRVSHFLPWIRSHTKEENGL
AL

FIG 1G.

SNELHQVPSNCDCLNGGTCVSNKYFSNIHWCNCPKKFGGQHCEIDKS//KPS
SPPEELKFQCGQKTLRPRFKIIGGEFTTIENQPWFAAIYRRHRGGSVTYVCG
GSLISPCWVISATHCFIDYPKKEDYIVYLGRSRLNSNTQGEMKFEVENLILH
KDYSADTLAHHNDIALLKIRSKEGRCAQPSRTIQTICLPSMYNDPQFGTSCE
ITGFGKENSTDYLYPEQLKMTVVKLISHRECQQPHYYGSEVTTKMLCAAD
PQWKTDSCQGDSGGPLVCSLQGRMTLTGIVSWGRGCALKDKPGVYTRVS
HFLPWIRSHTKEENGLAL

FIG 1H.

SNELHQVPSNCDCLNGGTCVSNKYFSNIHWCNCPKKFGGQHCEIDKSKTC
YEGNGHFYRGKASTDTMGRPCLPWNSATVLQQTYHAHRSDALQLGLGK
HNYCRNPDNRRRPWCYVQVGLKPLVQECMVHDCADGKKPSSPPEE

FIG 1I.

KTCYEGNGHFYRGKASTDTMGRPCLPWNSATVLQQTYHAHRSDALQLGL
GKHNYCRNPDNRRRPWCYVQVGLKPLVQECMVHDCADGKKPSSPPEE

FIG 1J.

aaaacctgctatgaggggaatggtcacttttaccgaggaaaggccagcactgaca
ccatgggccggccctgcctgccctggaactctgccactgtccttcagcaaacgta
ccatgcccacagatctgatgctcttcagctgggcctggggaaacataattactgc
aggaacccagacaaccggaggcgaccctggtgctatgtgcaggtgggcctaaagc
cgcttgtccaagagtgcatggtgcatgactgcgcagatggaaaa

FIG 1K.

agcaatgaacttcatcaagttccatcgaactgtgactgtctaaatggaggaacat
gtgtgtccaacaagtacttctccaacattcactggtgcaactgcccaaagaaatt
cggagggcagcactgtgaaatagataagtca

FIG 1L.

agcaatgaacttcatcaagttccatcgaactgtgactgtctaaatggaggaacat
gtgtgtccaacaagtacttctccaacattcactggtgcaactgcccaaagaaatt
cggagggcagcactgtgaaatagataagtcaaaaacctgctatgaggggaatggt
cacttttaccgaggaaaggccagcactgacaccatgggccggccctgcctgccct
ggaactctgccactgtccttcagcaaacgtaccatgcccacagatctgatgctct
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cttgctgaagatccgttccaaggagggcaggtgtgcgcagccatcccggactata
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cagattcctgccagggagactcaggggacccctcgtctgttcctccaaggccg
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aggaagagaatggcctggccctctga

FIG 1M.

agcaatgaacttcatcaagttccatcgaactgtgactgtctaaatggaggaacat
gtgtgtccaacaagtacttctccaacattcactggtgcaactgcccaaagaaatt
cggagggcagcactgtgaaatagataagtcaaaaacctgctatgaggggaatggt
cacttttaccgaggaaaggccagcactgacaccatgggccggccctgcctgccct
ggaactctgccactgtccttcagcaaacgtaccatgcccacagatctgatgctct
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ccctggtgctatgtgcaggtgggcctaaagccgcttgtccaagagtgcatggtgc
atgactgcgcagatggaaaa

FIG 1N.

aagccctcctctcctccagaagaattaaaatttcagtgtggccaaaagactctga
ggccccgctttaagattattgggggagaattcaccaccatcgagaaccagccctg
gtttgcggccatctacaggaggcaccgggggggctctgtcacctacgtgtgtgga
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tgagctggggccgtggatgtgccctgaaggacaagccaggcgtctacacgagagt
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ctctga

FIG 10.

```
agcaatgaacttcatcaagttccatcgaactgtgactgtctaaatggaggaacat
gtgtgtccaacaagtacttctccaacattcactggtgcaactgcccaaagaaatt
cggagggcagcactgtgaaatagataagtcaaaaacctgctatgaggggaatggt
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gcggccatctacaggaggcaccggggggggctctgtcacctacgtgtgtggaggca
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ga
```

FIG 1P.

agcaatgaacttcatcaagttccatcgaactgtgactgtctaaatggaggaacat
gtgtgtccaacaagtacttctccaacattcactggtgcaactgcccaaagaaatt
cggagggcagcactgtgaaatagataagtcaaagccctcctctcctccagaagaa
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tgaaggacaagccaggcgtctacacgagagtctcacacttcttaccctggatccg
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FIG 1Q.

agcaatgaacttcatcaagttccatcgaactgtgactgtctaaatggaggaacat
gtgtgtccaacaagtacttctccaacattcactggtgcaactgcccaaagaaatt
cggagggcagcactgtgaaatagataagtcaaaaacctgctatgaggggaatggt
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FIG 1R.
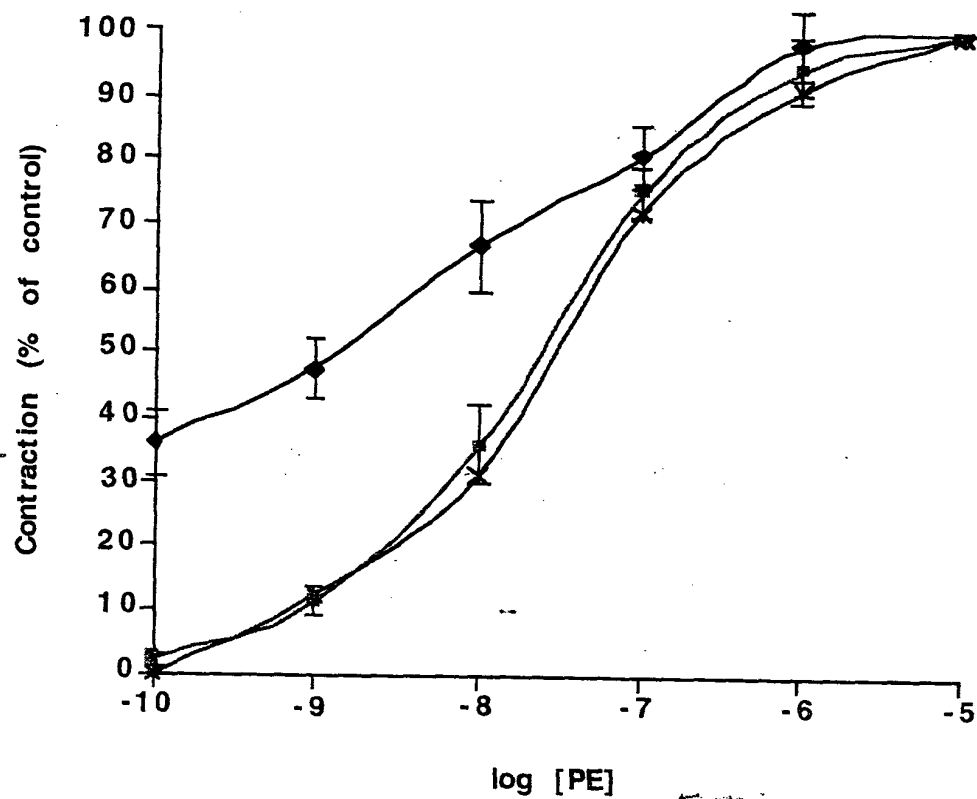
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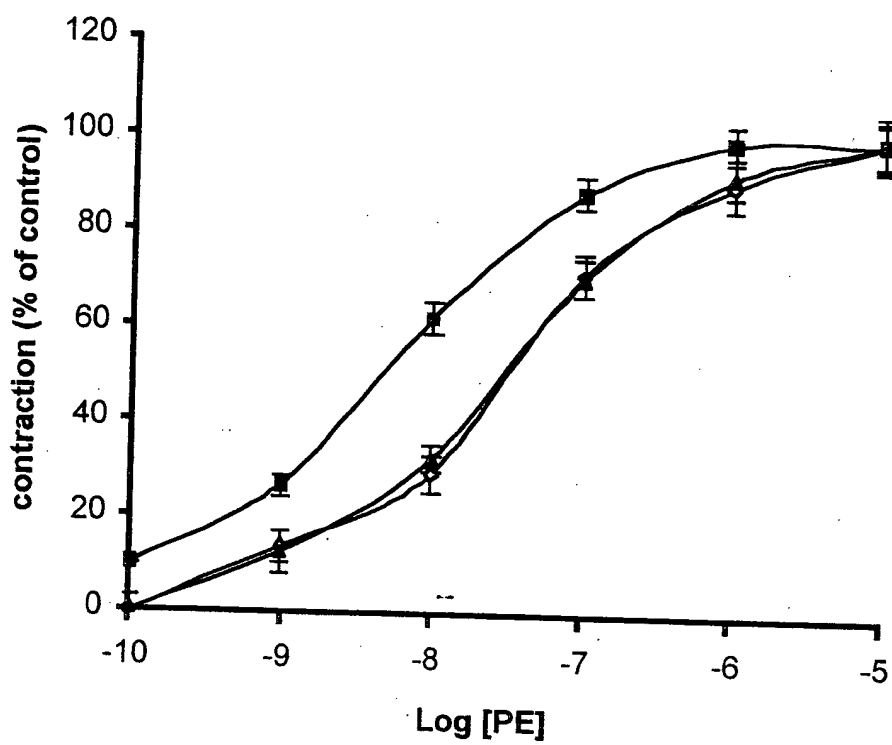tcctccagaagaa
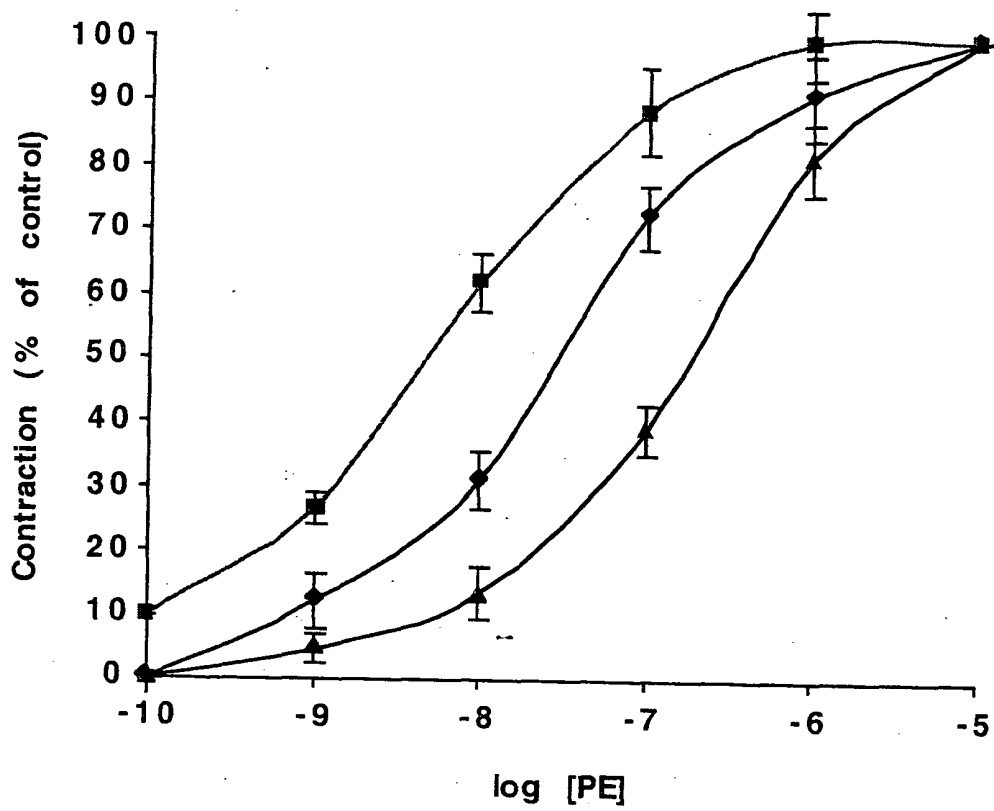
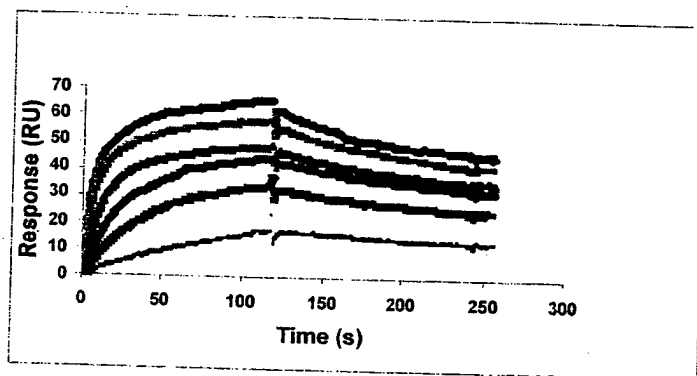**FIGURE 2**

FIGURE 3
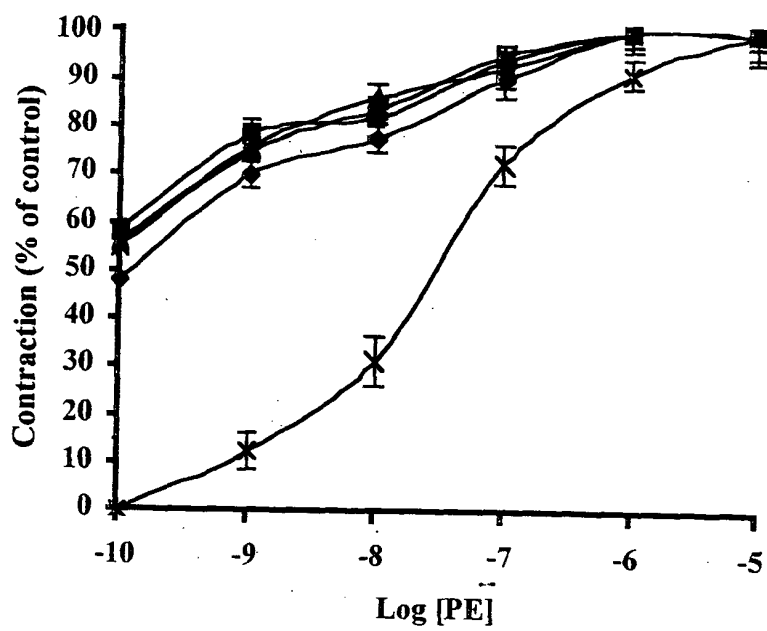
FIGURE 4

FIGURE 5A
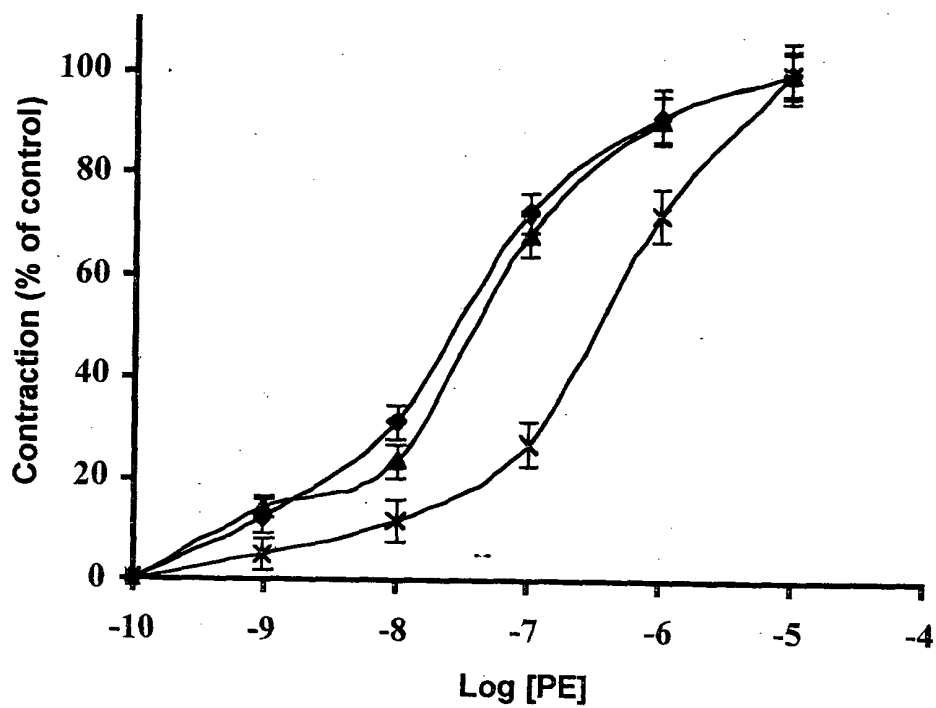
FIGURE 5B

A
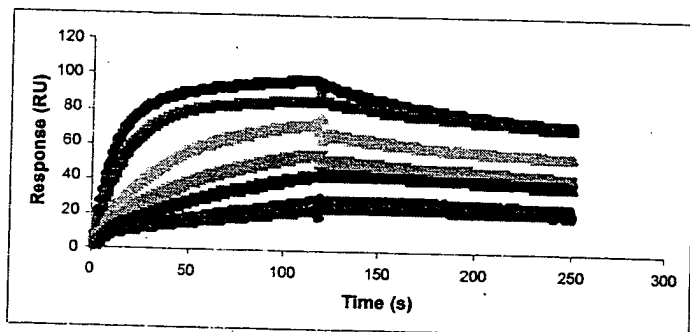
B
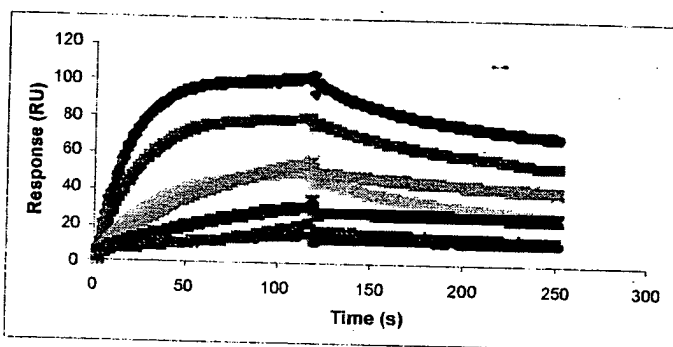
C

FIGURE 6

FIGURE 7

FIGURE 8